



50 IAC 26: Computer Standards for a Uniform and Common Property Tax Management System

Answering the “5 Ws (and How)” on Software Testing and Certification

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January 21, 2015



“What...?”: Overview

- What is 50 IAC 26?
 - The administrative rule enacted “to establish standards for computer systems used by Indiana counties for the administration of the property tax assessment, billing, and settlement process.”
- What is software testing and certification?
 - As specified in 50 IAC 26-18, software vendors and counties that use the vendors’ systems must be tested and certified to ensure the systems are operating within the standards laid out in 50 IAC 26.



“What...?”: Overview

- What are the three phases of software testing and certification?
 - Phase I: Each system is tested and certified on its standalone functionality.
 - Phase II: Systems are paired together and are tested and certified on their integrative functionality.



“What...?”: Overview

- What are the three phases of software testing and certification? (cont.)
 - Phase III: Counties are tested and certified to determine that they are using systems that have been deemed Phase I and Phase II compliant and that the systems are operating accordingly in the field.



“What...?”: Phase I

- What individual modules participated in Phase I testing?

CAMA	Personal Property	Oil & Gas	Sales Disclosure	Tax & Billing
GUTS PVDNet	AS2 PropMan	AS2 PetroMan	AS2 ScanMan	GUTS PVDNet
Thomson Reuters ProVal	GUTS PVDNet	XSoft INCama	GUTS PVDNet	Hamilton County Proper Tax
XSoft INCama	Thomson Reuters iDox		State of Indiana Gateway SDF	Low WinTax
	XSoft INCama		Thomson Reuters iDox	Nikish RMS
			XSoft INCama	Thomson Reuters MVP Tax



“What...?”: Phase I

- What sort of tests did the individual assessment modules have to demonstrate during Phase I testing?

Test	Oil/Gas	CAMA	Pers Prop	Sales Disclosure
Back-up of system files and restore	X	X	X	X
Record maintenance: Creating new records and checking for user/date/time stamp	X	X	X	X
Property tax cap allocations		X		
Sketch and photograph maintenance		X		



“What...?”: Phase I

- What sort of tests did the individual assessment modules have to demonstrate during Phase I testing? (cont.)

Test	Oil/Gas	CAMA	Pers Prop	Sales Disclosure
Record retrieval by characteristic	X	X	X	X
Assessment system Help functionality	X	X	X	X
Using cost schedules to calculate improvements of AV and updating the cost schedules		X		
Entering appeals in the system		X	X	
Assessment ratios and generating ratio study information for the Department		X		
Annual adjustment factors and their application to properties		X		
Generation of user-defined reports and the ability to save the queries and layout of the reports for future use	X	X	X	X



“What...?”: Phase I

- What sort of tests did the individual assessment modules have to demonstrate during Phase I testing? (cont.)

Test	Oil/Gas	CAMA	Pers Prop	Sales Disclosure
Assessment reports and forms		X	X	X
Histories/transaction logs	X	X	X	X
Data integrity (Lock guidance)	X	X	X	
Maintenance of historical assessment system data	X	X	X	X
Maintenance of future assessment system data		X	X	
System and data security (creating different user profiles)	X	X	X	X
Creation of Department file extracts (i.e., PARCEL, PERSPROP, MOBILE, SALESdisc, etc.)	X	X	X	X



“What...?”: Phase I

- What were several of the observations noted from Phase I testing?
 - All modules were able to correctly perform basic functionality like record retrieval based on defined characteristics and maintaining historic data.
 - The most common test deemed not compliant was the check test on file extracts generated at the end of the testing session.



“What...?”: Phase I

- What were several of the observations noted from Phase I testing? (cont.)
 - The creation of user defined reports is the one test area that took the longest to complete for all modules.
 - The capturing of images during testing, also, tended to slow the process down.



“What...?”: Phase II

- What vendor pairings participated in Phase II testing?

Software/Version	Vendor Name	Date of Phase II Certification
Sales Disclosure/CAMA	Sales Disclosure/CAMA	
ScanMan Version 3.3.5	AS2	September 12, 2014
ProVal Version 9.00	Thomson Reuters	September 12, 2014
iDox Version 5.2	Thomson Reuters	September 12, 2014
ProVal Version 9.00	Thomson Reuters	September 12, 2014
Gateway SDF Version 3.0	State of Indiana	September 12, 2014
ProVal Version 9.00	Thomson Reuters	September 12, 2014
INcama Version 1.4	XSoft	August 29, 2014
INcama Version 1.4	XSoft	August 29, 2014
Gateway SDF Version 3.0	State of Indiana	August 29, 2014
INcama Version 1.4	XSoft	August 29, 2014



“What...?”: Phase II

- What vendor pairings participated in Phase II testing? (cont.)

Software/Version	Vendor Name	Date of Phase II Certification
Sales Disclosure/CAMA	Sales Disclosure/CAMA	
ScanMan Version 3.3.5	AS2	August 29, 2014
INcama Version 1.4	XSoft	August 29, 2014
ScanMan Version 3.3.5	AS2	September 9, 2014
PVDNet Version 4.0	GUTS	September 9, 2014
PVDNet Version 4.0	GUTS	September 9, 2014
PVDNet Version 4.0	GUTS	September 9, 2014
Gateway SDF Version 3.0	State of Indiana	September 9, 2014
PVDNet Version 4.0	GUTS	September 9, 2014



“What...?”: Phase II

- What vendor pairings participated in Phase II testing? (cont.)

Software/Version	Vendor Name	Date of Phase II Certification
Oil and Gas/Tax and Billing	Oil and Gas/Tax and Billing	
PetroMan Version 1.5.4	AS2	September 24, 2014
MVP Tax Version 3.12.0	Thomson Reuters	September 24, 2014
PetroMan Version 1.5.4	AS2	October 28, 2014
WinTax Version 7.0.0.19	Low	October 28, 2014
INcama Version 1.4	XSoft	October 3, 2014
WinTax Version 7.0.0.19	Low	October 3, 2014
INcama Version 1.4	XSoft	December 1, 2014
MVP Tax Version 3.12.0	Thomson Reuters	December 1, 2014
INcama Version 1.4	XSoft	November 10, 2014
PVDNet Version 4.0	GUTS	November 10, 2014



“What...?”: Phase II

- What vendor pairings participated in Phase II testing? (cont.)

Software/Version	Vendor Name	Date of Phase II Certification
Personal Property/Tax and Billing	Personal Property/Tax and Billing	
iDox Version 5.2	Thomson Reuters	November 10, 2014
MVP Tax Version 3.12.0	Thomson Reuters	November 10, 2014
iDox Version 5.2	Thomson Reuters	December 1, 2014
WinTax Version 7.0.0.19	Low	December 1, 2014
INcama Version 1.4	XSoft	October 3, 2014
WinTax Version 7.0.0.19	Low	October 3, 2014
INcama Version 1.4	XSoft	December 1, 2014
MVP Tax Version 3.12.0	Thomson Reuters	December 1, 2014
PropMan Version 2.1.9	AS2	October 10, 2014
PVDNet Version 4.0	GUTS	October 10, 2014



“What...?”: Phase II

- What vendor pairings participated in Phase II testing? (cont.)

Software/Version	Vendor Name	Date of Phase II Certification
Personal Property/Tax and Billing	Personal Property/Tax and Billing	
PropMan Version 2.1.9	AS2	October 3, 2014
MVP Tax Version 3.12.0	Thomson Reuters	October 3, 2014
PropMan Version 2.1.9	AS2	October 28, 2014
WinTax Version 7.0.0.19	Low	October 28, 2014
PropMan Version 2.1.9	AS2	October 28, 2014
ProperTax Version 7	Hamilton County	October 28, 2014
PVDNet Version 4.0	GUTS	October 30, 2014
PVDNet Version 4.0	GUTS	October 30, 2014
INcam Version 1.4	XSoft	November 10, 2014
PVDNet Version 4.0	GUTS	November 10, 2014



“What...?”: Phase II

- What vendor pairings participated in Phase II testing? (cont.)

Software/Version	Vendor Name	Date of Phase II Certification
CAMA/Tax and Billing	CAMA/Tax and Billing	
ProVal Version 9.00	Thomson Reuters	December 5, 2014
MVP Tax Version 3.12.2	Thomson Reuters	December 5, 2014
ProVal Version 9.00	Thomson Reuters	December 18, 2014
WinTax Version 7.0.0.22	Low	December 18, 2014
ProVal Version 9.00	Thomson Reuters	December 19, 2014
ProperTax Version 7	Hamilton County	December 19, 2014
INcama Version 1.5	XSoft	December 12, 2014
MVP Tax Version 3.12.2	Thomson Reuters	December 12, 2014
INcama Version 1.5	XSoft	January 5, 2015
WinTax Version 7.0.0.22	Low	January 5, 2015



“What...?”: Phase II

- What vendor pairings participated in Phase II testing? (cont.)

Software/Version	Vendor Name	Date of Phase II Certification
CAMA/Tax and Billing	CAMA/Tax and Billing	
PVDNet Version 4.0	GUTS	January 14, 2015
PVDNet Version 4.0	GUTS	January 14, 2015
PVDNet Version 4.0	GUTS	January 14, 2015
WinTax Version 7.0.0.23	Low	January 14, 2015
INcama Version 1.5	XSoft	January 2, 2015
PVDNet Version 4.0	GUTS	January 2, 2015



“What...?”: Phase II

- What sort of tests did the vendor pairings have to demonstrate during Phase II testing?
 - Sales Disclosure to CAMA: CAMA’s functionality to capture and maintain all sales-related data required for pricing models and ratio study completion
 - Sales Disclosure to CAMA: CAMA’s functionality to capture and maintain in the database a snapshot of the physical characteristics of the property at the time of the sale.



“What...?”: Phase II

- What sort of tests did the vendor pairings have to demonstrate during Phase II testing? (cont.)
 - Oil & Gas to Tax & Bill: Annual interface of assessment data from assessor’s office to auditor’s office
 - Oil & Gas to Tax & Bill: Post certification lock guidance
 - Oil & Gas to Tax & Bill: Authorized unlocking and re-rolling of AVs from assessor’s office to auditor’s office



“What...?”: Phase II

- What sort of tests did the vendor pairings have to demonstrate during Phase II testing? (cont.)
 - Personal Property to Tax & Bill: Annual interface of assessment data from assessor's office to auditor's office
 - Personal Property to Tax & Bill: Post certification lock guidance
 - Personal Property to Tax & Bill: Authorized unlocking and re-rolling of AVs from assessor's office to auditor's office



“What...?”: Phase II

- What sort of tests did the vendor pairings have to demonstrate during Phase II testing? (cont.)
 - CAMA to Tax & Bill: Annual interface of assessment data from assessor’s office to auditor’s office
 - CAMA to Tax & Bill: Post certification lock guidance
 - CAMA to Tax & Bill: Authorized unlocking and re-rolling of AVs from assessor’s office to auditor’s office



“What...?”: Phase II

- What sort of tests did the vendor pairings have to demonstrate during Phase II testing? (cont.)
 - CAMA to Tax & Bill: For changes in owner and billing data made in the tax & bill system, necessary adjustments can be made to the parcel by users in the CAMA system before changes are implemented. The CAMA system must allow users to view, accept, and make any necessary adjustments before choosing to process the data.



“What...?”: Phase II

- What sort of tests did the vendor pairings have to demonstrate during Phase II testing? (cont.)
 - CAMA to Tax & Bill: For changes in gross AV made in the tax & bill system via CE or AA, the updated value is integrated in the CAMA system as a separate posting that does not overwrite the value that was originally interfaced or the current value in the CAMA system.



“What...?”: Phase II

- What sort of tests did the vendor pairings have to demonstrate during Phase II testing? (cont.)
 - CAMA to Tax & Bill: For a new homestead deduction in a new filing made in the tax & bill system, the CAMA user is prompted if a homestead deduction is processed on a parcel that does not currently have an assessed value allocation to a 1% land and 1% improvement.



“What...?”: Phase II

- What sort of tests did the vendor pairings have to demonstrate during Phase II testing? (cont.)
 - CAMA to Tax & Bill: The CAMA’s system ability to generate a report on all parcels with an active homestead without an assessed value allocation to a 1% bucket.



“What...?”: Phase II

- What were several of the observations noted from Phase II testing?
 - The integrative functionality between systems appears to be operating in a compliant manner based on the testing demonstrations.
 - The largest majority of errors encountered during testing occurred within one individual module of a vendor pairing and were not caused by the integration of data.



“What...?”: Phase II

- What were several of the observations noted from Phase II testing? (cont.)
 - The virtual meeting environment helped expedite the flow of the testing process.
 - Proactive scheduling helped Phase II stay on a timely track.



“Who...?”

- Who are the key stakeholders involved in the certification process?
 - All 92 counties (county assessors, county auditors, and county treasurers)
 - Property Tax Management System software vendors
 - Department of Local Government Finance
 - Legislative Services Agency
 - State Board of Accounts
 - Auditor of State



“When...?”

- When did the current testing and certification process start? When does it end?
 - Official testing window opened on July 1, 2013. (start of Phase I testing)
 - **All three phases of the testing and certification process must be completed by June 30, 2015.**
 - Cycle repeats every five years.



“Where...?”

- Where did we end up compared to our anticipated time frame for Phase I?
 - Original Targeted Completion Date: June 2014.
 - 19 individual modules completed the initial round of Phase I testing by June 30, 2014.
 - 15 modules received their Phase I results by June 30, 2014.
 - 10 modules earned their Phase I certification status by June 30, 2014.



“Where...?”

- Where did we end up compared to our anticipated time frame for Phase II?
 - Original Targeted Completion Date: April 2015
 - Revised Targeted Completion Date: January 2015
 - 34 individual vendor pairings were originally identified by the Department as needing to be Phase II certified.
 - 32 of these vendor pairings have completed Phase II testing as of January 14, 2015.
 - 32 of these vendor pairings have been Phase II certified as of January 14, 2015.



“Where...?”

- Where did Phase I and Phase II certification testing take place? Where will Phase III occur?
 - Phase I: Indiana Government Center
 - Phase II: Vendors had the option to test in person at the Indiana Government Center or remotely via a virtual meeting environment, like WebEx or GoToMeeting
 - Phase III: “In the field” – county assessors’ and county auditors’ offices.



“Why...?”

- Why do we go through the process of software testing and certification?
 - To attain uniformity in property tax administration practices in each county in the state.
 - To improve the management and analysis ability of the Department and counties.
 - To ensure the functionality and integration of property tax management systems.



“How...?”

- How will counties be assessed for Phase III?
 - A Department representative will spend roughly 2 hours on site at the county auditor's and assessor's offices.
 - The tester will walk through testing scenarios with county staff.



Phase III Test Scenarios

- Four Test Areas
 - Property Tax Management System Help Functionality
 - Capture and Maintenance of Data on Record Addition and Update
 - Record Retrieval by Characteristic
 - Maintenance of Data from Prior Years



Phase III Test Scenarios: Test Area 1

- Test Area 1: Property Tax Management System Help Functionality
- Test 1: Have the county user demonstrate that they can access the help functionality (e.g., user guide or training manual) of their system.
- If your assessment modules are not part of an integrated system, you will be asked to show the help functionality for each individual module.



Phase III Test Scenarios: Test Area 2

- Test Area 2: Capture and Maintenance of Data on Record Addition and Update
- The county user will be asked to demonstrate three tests from a list of 10 different tests.
- The tests should be demonstrated using actual information that is pending data entry into the property tax management system.



Phase III Test Scenarios: Test Area 2

1. Enter a sales disclosure record into the sales disclosure system.
2. Enter a personal property filing into the personal property system.
3. Enter an appeal into the assessment system.
4. Add an improvement to an existing real property record. Along with the detail coding that goes into the various data entry fields for the improvement, make and save a sketch of the improvement to the record.



Phase III Test Scenarios: Test Area 2

5. Perform a split on an active real property record.
6. Perform a combination on two active real property records.
7. Perform a transfer of ownership on a real property record.
8. Change the mailing address on a real property record.



Phase III Test Scenarios: Test Area 2

9. Change the parcel number on a real property record due to annexation.
10. Enter a correction of error in the tax and billing system.
 - The testing evaluator may ask the county user to generate and display standard, pre-formatted forms (e.g., a Form 11, a property record card) following the completion of the tests listed above



Phase III Test Scenarios: Test Area 3

- Test Area 3: Record Retrieval by Characteristic
- Test 1: Have the county user enter a parcel number and access the corresponding property record for a commercial or industrial real property record.
- Test 2: Have the county user enter a property address and access the corresponding property record for an annually assessed mobile home.



Phase III Test Scenarios: Test Area 3

- Test 3: For personal property records, have the county user enter the first few letters of an owner's name and generate the corresponding list of resulting records.
- Test 4: Have the county user enter the first few letters of a street name and generate the corresponding list of resulting records. From the list of result records, have the county user access a real property record with homestead AV.



Phase III Test Scenarios: Test Area 3

- Test 4 (cont.): Then, either from the same list of results or from another list generated in a similar manner, have the county user access a non-homestead residential real property record.
- The testing evaluator will ask to see the AV allocations screen for the records generated from these tests.



Phase III Test Scenarios: Test Area 4

- Test Area 4: Maintenance of Data from Prior Years
- Test 1: Have the county user access one real property record, one annually assessed mobile home record, and one personal property record from the 2012 Pay 2013 cycle.
- The 2013 Pay 2014 cycle may be used under certain situations.



What are the counties' next steps?

- Review the testing scenarios sent out by the Department on October 3, 2014.
- Coordinate with the Department on a testing date.
- Send any questions to Matt Parkinson (mparkinson@dlgf.in.gov) or James Johnson (jjohnson@dlgf.in.gov)



2015 Data Submission Calendar

March 2, 2015	<ul style="list-style-type: none">• Mobile<ul style="list-style-type: none">• MOBILE• APPEALMH	
April 1, 2015	<ul style="list-style-type: none">• Sales<ul style="list-style-type: none">• SALEDISC• SALECONTAC• SALEPARCEL	
September 30, 2015	<ul style="list-style-type: none">• Real Property<ul style="list-style-type: none">• PARCEL• LAND• IMPROVE• DWELLING• BUILDING• BLDDTL• APPEAL	<ul style="list-style-type: none">• Personal Property<ul style="list-style-type: none">• PERSPROP• POOLDATA• APPEALPP• OILGAS• OILGASSALL



A note about Mobile Data

- IC 6-1.1-7-16 requires the Department to develop a system for recording mobile home property tax information using VINs.
- In 2015, the Department will begin issuing compliance checks for MOBILE data files.
- Assessors should make a good-faith effort to collect and submit VIN information.
- Mobile submissions are due **March 2, 2015.**



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